Page 1

Declaration and Power of Attorney For Utility or Design Patent Application English Language Declaration

As a below named inventor	, I hereby declare that:		
My residence, post office a	ddress and citizenship are	e as stated below next to my nan	ne.
I believe I am the original, joint inventor (if plural nan is sought on the invention e	nes are listed below) of the	only one name is listed below) on the subject matter which is claimed	or an original, first and ed and for which a patent
APPARATUS AND MET	HOD FOR AUTOMATE	<u>D HEADSPACE GAS ANALY</u>	SIS
the specification of which i	s attached hereto unless th	he following box is checked:	•
was filed on	· · · · · · · · · · · · · · · · · · ·		as
United States Applicatio and was amended on	n Number		(if applicable) or,
PCT International Applicand was amended on	cation Number		(if applicable)
I hereby state that I have re including the claims, as am	viewed and understand the	ne contents of the above identific t referred to above.	ed specification,
I acknowledge the duty to of Federal Regulations, §1.	lisclose information whic 56.	h is material to patentability as	defined in Title 37, Code
identified below, by checki	ng the "No" box, any fore	cate, or §365(a) of any PCT inte United States of America, listed eign application for patent or inte before that of the application	ventor's certificate, or of
(Number)	(Country)	(Day/Month/Year Filed)	Yes No
(Number)	(Country)	(Day/Month/Year Filed)	Yes No
(Number) Additional foreign appl	(Country)	(Day/Month/Year Filed) d on a supplemental priority she	Yes No
I hereby claim the benefit use application(s) listed below.		tes Code §119(e) of any United	States provisional
(Number)	(Day/Month/Y	ear Filed)	
(Number)	(Day/Month/Y	ear Filed)	•
(Number)	(Day/Month/Y	ear Filed)	
Additional provisional	application numbers are l	isted on a supplemental priority	sheet attached hereto.

16	and the cubiect matter of each	n of the claims of this application is	not disclosed in the prior United
States States	or PCT international applica Code §112, I acknowledge the Title 37 Code of Federa	tion in the manner provided by the i	th is material to patentability as available between the filing date of the
·	(Application No.)	(Filing Date)	(Status) (patented, pending, abandoned)
. 	(Application No.)	(Filing Date)	(Status) (patented, pending, abandoned)
	dditional U.S. or internationa etc.	al application numbers are listed on a	a supplemental priority sheet attached
on info knowl under jeopar	ormation and belief are belie cdge that willful false statem Section 1001 of Title 18 of the dize the validity of the appli-	ved to be true; and further that these nents and the like so made are punish he United States Code and that such cation or any patent issued thereon.	nable by fine or imprisonment, or both, willful false statements may
from 6 Patent attorn	other his foreign patent agen and Trademark Office regar by or agent and the undersign	t or corporate representative, if any, ding this application without direct	communication between the U.S. persons from whom instructions may
with t	he Customer Number provid	amed inventor, I hereby appoint the ed below to prosecute this application ected therewith, and direct that all compared CUSTOMER NUMBER 7055	orrespondence be addressed to that
The a	opointed attorneys include: Neil F. Greenblum Reg Bruce H. Bernstein Reg Arnold Turk Reg. James L. Rowland Reg Robert W. Mueller Reg	No. 28,394 Stephen M. Roylar No. 29,027 Leslie J. Paperner No. 33,094 William Pieprz No. 32,674 William E. Lyddar	nce Reg. No. 31,296 Reg. No. 33,329 Reg. No. 33,630 ne Reg. No. 41,568
	At:	Greenblum & Bernstein, P.L.C. 1950 Roland Clarke Place Reston, VA 20191	
	Direct Telephone	Calls to: Greenblum & Bernstein, F	P.L.C. (703) 716-1191
- %-	Full name of sole or first inventor	or .	
	Inventor's signature	L	Date 10/14/03
	Residence . Charlottesville, VA		
	Citizenship United States		
	Post Office Address c/o Lighthouse Instruments, LLC 2030 Avon Ct. Charlottesville, V	/A 22901	
Full na	(Supply similar inform me of second joint inventor, if any	nation and signature for second and	subsequent joint inventors.)
	n R. ANDERSON		

Second Inventor's signature	10/14/03
Residence Charlottesville, VA	
Citizenship United States	
Post Office Address c/o Lighthouse Instruments, LLC -2030 Avon Ct. Charlottesville, VA 22901	
Full name of third joint inventor, if any Warren M. GRIFFITH	
Third Inventor's signature Wun 201 State	Date Oct 14, Zov 3
Residence Charlottesville, VA	*
Citizenship United States	
Post Office Address c/o Lighthouse Instruments, LLC 2030 Avon Ct. Charlottesville; VA 22901	×
Full name of fourth joint inventor, if any Glenn E. EDWARDS	
Fourth Inventor's signature	Date
Residence Palo Alto, CA	
Citizenship United States	
Post Office Address c/o Lighthouse Instruments, LLC 2030 Avon Ct. Charlottesville, VA 22901	
Pull name of fifth joint inventor, if any George R. HOWARD	
Fifth Inventor's signature	Date
Residence Kennett Square, PA	
Citizenship United States	
Post Office Address c/o Lighthouse Instruments, LLC 2030 Avon Ct. Charlottesville, VA 22901	
Full name of sixth joint inventor, if any	
Sixth Inventor's signature	Date
Residence	
Citizenship	8
Post Office Address	

Page 1

Declaration and Power of Attorney For Utility or Design Patent Application English Language Declaration

As a below named inventor,	I hereby declare that:		
My residence, post office ad-	dress and citizenship are	as stated below next to my name.	
I haliawa I am tha aciginal fi	rst and sole inventor (if of a re listed below) of the	only one name is listed below) or an e subject matter which is claimed and	original, first and I for which a patent is
APPARATUS AND METH	OD FOR AUTOMATE	ED HEADSPACE GAS ANALYSIS	
the specification of which is	attached hereto unless the	he following box is checked:	
was filed on			
United States Application and was amended on	Number		(if applicable) or,
PCT International Application and was amended on	ation Number		(if applicable)
I hereby state that I have rev the claims, as amended by an	riewed and understand the transport of t	he contents of the above identified sp to above.	ecification, including
I acknowledge the duty to d of Federal Regulations, §1.5	isclose information which 6.	ch is material to patentability as defin	ed in Title 37, Code
foreign application(s) for pa which designated at least on	tent or inventor's certifice country other than the cathe "No" box, any form	5, United States Code §119 (a-d) or cate, or §365(a) of any PCT internate United States of America, listed beliegn application for patent or inventous before that of the application on with	ow. I have also or's certificate, or of
			Priority Claimed
(Number)	(Country)	(Day/Month/Year Filed)	Yes No
(Number)	(Country)	(Day/Month/Year Filed)	Yes No
(Number)	(Country)	(Day/Month/Year Filed)	Yes No
		d on a supplemental priority sheet attates Code §119(e) of any United Stat	
(Number)	(Day/Month	/Year Filed)	•
(Number)	(Day/Month	/Year Filed)	
(Number)	(Day/Month		
Additional provisional a	pplication numbers are	listed on a supplemental priority shee	et attached hereto.

Page 2

or PCT international application in the	the claims of this application is manner provided by the first pose information which is materially became available between the control of t	any United States application(s), or states of America, listed below and, so not disclosed in the prior United States aragraph of Title 35, United States Code at to patentability as defined in Title 37, the filing date of the prior application and
(Application No.)	(Filing Date)	(Status) (patented, pending, abandoned)
(Application No.)	(Filing Date)	(Status) (patented, pending, abandoned)
Additional U.S. or international aphereto.	pplication numbers are listed on	a supplemental priority sheet attached
that willful false statements and the lik Section 1001 of Title 18 of the United validity of the application or any pater	the so made are punishable by fir a states Code and that such will at issued thereon.	
Patent and Trademark Office regardin attorney or agent and the undersigned taken, the U.S. attorney or agent name	g this application without direct. In the event of a change in the ed herein will be so notified by	the undersigned.
with the Customer Number provided and Trademark Office connected there	ed inventor, I hereby appoint the below to prosecute this applicate with, and direct that all correst	ne attorney(s) and/or agent(s) associated tion and transact all business in the Patent pondence be addressed to that Customer
Number:	CUSTOMER NUMBER 76	055
The appointed attorneys include: Neil F. Greenblum Reg. No Bruce H. Bernstein Reg. No Arnold Turk Reg. No. James L. Rowland Reg. No Robert W. Mueller Reg. No.	32.674 William E. Lyddai	nce Reg. No. 31,296 Reg. No. 33,329 Reg. No. 33,630 ne Reg. No. 41,568
1	Greenblum & Bernstein, P.L.C. 950 Roland Clarke Place Reston, VA 20191	
Direct Telephone C	alls to: Greenblum & Bernstein	, P.L.C. (703) 716-1191

Full name of sole or first inventor			
James R. VEALE			-
Inventor's signature	•	Date	
Residence Charlottesville, VA			
Citizenship			
United States			
Post Office Address c/o Lighthouse Instruments, LLC 2030 Avon Ct. Charlottesville, VA 22901			

(Supply similar information and signature for second and subsequent joint inventors.)

P24039.DC1	
Full name of second joint inventor, if any	
William R. ANDERSON	
Second Inventor's signature	Date
Residence Charlottesville, VA	-
Citizenship United States	
Post Office Address c/o Lighthouse Instruments, LLC 2030 Avon Ct. Charlottesville, VA 22901	
Full name of third joint inventor, if any Warren M. GRIFFITH	·
Third Inventor's signature	Date
Residence Charlottesville, VA	
Citizenship United States	
Post Office Address c/o Lighthouse Instruments, LLC 2030 Avon Ct. Charlottesville, VA 22901	
Full name of fourth joint inventor, if any Glenn F. EDWARDS	
Fourth Inventor's signature	Date 10-13-03
Residence Palo Alto, CA	
Citizenship United States	
Post Office Address c/o Lighthouse Instruments, LLC 2030 Avon Ct. Charlottesville, VA 22901	
Full name of fifth joint inventor, if any George R. HOWARD	
Fifth Inventor's signature	Date
Residence Kennett Square, PA	
Citizenship United States	· · · · · · · · · · · · · · · · · · ·
Post Office Address c/o Lighthouse Instruments, LLC 2030 Avon Ct. Charlottesville, VA 22901	
Full name of sixth joint inventor, if any	
Sixth Inventor's signature	Date
Residence	
Citizenship	
Post Office Address	

. Page 1

Declaration and Power of Attorney For Utility or Design Patent Application English Language Declaration

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56. I hereby claim foreign priority benefits under Title 35, United States Code §119 (a-d) or §365(b) of any foreign application(s) for patent or inventor's certificate, or §365(a) of any PCT international application which designated at least one country other than the United States of America, listed below. I have also identified below, by checking the "No" box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed: Priority Claimed (Number) (Country) (Day/Month/Year Filed) Yes No (Number) (Country) (Day/Month/Year Filed) Yes No Additional foreign application numbers are listed on a supplemental priority sheet attached hereto. I hereby claim the benefit under Title 35, United States Code §119(e) of any United States provisional	As a below named inventor, I hereby declare that:
Joint inventor (it plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled APPARATUS AND METHOD FOR AUTOMATED HEADSPACE GAS ANALYSIS the specification of which is attached hereto unless the following box is checked: was filed on united States Application Number and was amended on (if applicable) or, PCT International Application Number and was amended on (if applicable) I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56. I hereby claim foreign priority benefits under Title 35, United States Code §119 (a-d) or §365(b) of any foreign applications, §1.56. I hereby claim foreign priority benefits under Title 35, United States of America, listed below. I have also identified below, by checking the "No" box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed: (Number) (Country) (Day/Month/Year Filed) Yes No Additional foreign application numbers are listed on a supplemental priority sheet attached hereto. I hereby claim the benefit under Title 35, United States Code §119(e) of any United States provisional application(s) listed below. (Number) (Day/Month/Year Filed) Yes No Additional foreign application numbers are listed on a supplemental priority sheet attached hereto. I hereby claim the benefit under Title 35, United States Code §119(e) of any United States provisional application(s) listed below.	My residence, post office address and citizenship are as stated below next to my name.
the specification of which is attached hereto unless the following box is checked: was filed on	joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent
United States Application Number and was amended on	APPARATUS AND METHOD FOR AUTOMATED HEADSPACE GAS ANALYSIS
United States Application Number and was amended on	the specification of which is attached hereto unless the following box is checked:
and was amended on	was filed onas
PCT International Application Number and was amended on	United States Application Number (if applicable) or,
I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56. I hereby claim foreign priority benefits under Title 35, United States Code §119 (a-d) of §365(b) of any foreign application(s) for patent or inventor's certificate, or §365(a) of any PCT international application which designated at least one country other than the United States of America, listed below. I have also identified below, by checking the "No" box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed: Priority Claimed Prio	PCT International Application Number
I hereby claim foreign priority benefits under Title 35, United States Code §119 (a-d) or §365(b) of any foreign application(s) for patent or inventor's certificate, or §365(a) of any PCT international application which designated at least one country other than the United States of America, listed below. I have also identified below, by checking the "No" box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed: Priority Claimed Priority Claim	I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.
Toreign application(s) for patent or inventor's certificate, or §365(a) of any PCT international application which designated at least one country other than the United States of America, listed below. I have also identified below, by checking the "No" box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed: Priority Claimed (Number) (Country) (Day/Month/Year Filed) (Number) (Country) (Day/Month/Year Filed) Yes No (Number) (Country) (Day/Month/Year Filed) Yes No Additional foreign application numbers are listed on a supplemental priority sheet attached hereto. I hereby claim the benefit under Title 35, United States Code §119(e) of any United States provisional application(s) listed below. (Number) (Day/Month/Year Filed)	I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.
(Number) (Country) (Day/Month/Year Filed) Yes No (Number) (Country) (Day/Month/Year Filed) Yes No (Number) (Country) (Day/Month/Year Filed) Yes No Additional foreign application numbers are listed on a supplemental priority sheet attached hereto. I hereby claim the benefit under Title 35, United States Code §119(e) of any United States provisional application(s) listed below. (Number) (Day/Month/Year Filed)	which designated at least one country other than the United States of America, listed below. I have also identified below, by checking the "No" box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed:
(Number) (Country) (Day/Month/Year Filed) Yes No Additional foreign application numbers are listed on a supplemental priority sheet attached hereto. I hereby claim the benefit under Title 35, United States Code §119(e) of any United States provisional application(s) listed below. (Number) (Day/Month/Year Filed)	
(Number) (Country) (Day/Month/Year Filed) Yes No Additional foreign application numbers are listed on a supplemental priority sheet attached hereto. I hereby claim the benefit under Title 35, United States Code §119(e) of any United States provisional application(s) listed below. (Number) (Day/Month/Year Filed)	
Additional foreign application numbers are listed on a supplemental priority sheet attached hereto. I hereby claim the benefit under Title 35, United States Code §119(e) of any United States provisional application(s) listed below. (Number) (Day/Month/Year Filed)	(Number) (Country) (Day/Month/Year Filed) Yes No
(Number) (Day/Month/Year Filed)	()
* * * * * * * * * * * * * * * * * * *	I hereby claim the benefit under Title 35, United States Code §119(e) of any United States provisional application(s) listed below.
(Number) (Day/Month/Year Filed)	(Number) (Day/Month/Year Filed)
\cdot	(Number) (Day/Month/Year Filed)
(Number) (Day/Month/Year Filed)	(Number) (Day/Month/Year Filed)
Additional provisional application numbers are listed on a supplemental priority sheet attached hereto.	Additional provisional application numbers are listed on a supplemental priority sheet attached hereto.

Page 2

or PC §112, Code	ar as the subject matter of e T international application I acknowledge the duty to of Federal Regulations §1.	ach of the claims of this applicati in the manner provided by the fir disclose information which is ma	ted States of America, listed below and, ion is not disclosed in the prior United States of East paragraph of Title 35, United States Caterial to patentability as defined in Title 3 een the filing date of the prior application in.	ode
:	(Application No.)	(Filing Date)	(Status) (patented, pending, abandoned)	
	(Application No.)	(Filing Date)	(Status) (patented, pending, abandoned)	
A he	dditional U.S. or internatio	nal application numbers are listed	d on a supplemental priority sheet attache	:d
know under	ormation and belief are belieded; that willful false state Section 1001 of Title 18 of	neved to be true; and further that ements and the like so made are n	ledge are true and that all statements made these statements were made with the bunishable by fine or imprisonment, or bo such willful false statements may eon.	
Paten attorn	t and Trademark Office reg ey or agent and the undersi	and or corporate representative, it arding this application without di	ned herein to accept and follow instruction any, as to any action to be taken in the irect communication between the U.S. the persons from whom instructions may ed by the undersigned.	
Patent	he Customer number provi	ided below to prosecute this appli	t the attorney(s) and/or agent(s) associated ication and transact all business in the all correspondence be addressed to that	d
The o	anointed attaurant in the leaf	CUSTOMER NUMBER	7055	
The a	James L. Rowland Re	eg. No. 28,394 Stephen M. R eg. No. 29,027 Leslie J. Pape g. No. 33,094 William Piepr g. No. 32,674 William E. Ly g. No. 35,043	z Reg. No. 33,630	
	At:	Greenblum & Bernstein, P.L.C. 1950 Roland Clarke Place Reston, VA 20191		
	Direct Telephon	e Calls to: Greenblum & Bernste	ein, P.L.C. (703) 716-1191	
g				
	Full name of sole or first invent	tor	•	,
	James R. VEALE			
*	Inventor's signature		Date	
	Residence Charlottesville, VA	*		
i				

Residence
Charlottesville, VA

Citizenship
United States

Post Office Address
c/o Lighthouse Instruments, LLC
2030 Avon Ct. Charlottesville, VA 22901

(Supply similar information and signature for second and subsequent joint inventors.)

Full name of second joint inventor, if any

William R. ANDERSON
Second Inventor's signature Date
Residence Charlottesville, VA
Citizenship United States
Post Office Address c/o Lighthouse Instruments, LLC 2030 Avon Ct. Charlottesville, VA 22901
Full name of third joint inventor, if any Warren M. GRIFFITH
Third Inventor's signature Date
Residence Charlottesville, VA
Citizenship United States
Post Office Address c/o Lighthouse Instruments, LLC 2030 Avon Ct. Charlottesville, VA 22901
Full name of fourth joint inventor, if any Glenn E. EDWARDS
Fourth Inventor's signature Date
Residence Palo Alto, CA
Citizenship United States
Post Office Address c/o Lighthouse Instruments, LLC 2030 Avon Ct. Charlottesville, VA 22901
Full name of fifth joint inventor, if any George R. HOWARD
Fifth Inventor's signature Date 10-14-2005
Kennett Square, PA
Citizenship United States
Post Office Address
Post Office Address c/o Lighthouse Instruments, LLC 2030 Avon Ct. Charlottesville, VA 22901
2030 Avon Ct. Charlottesville, VA 22901 Full name of sixth joint inventor, if any
Full name of sixth joint inventor, if any
Full name of sixth joint inventor, if any Sixth Inventor's signature Date